

Notice of Allowability

Application No.

10/728,842

Examiner

Huan H. Tran

Applicant(s)

SILVERBROOK, KIA

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application papers filed on 12/08/03.
2. ☒ The allowed claim(s) is/are 1-40.
3. ☒ The drawings filed on 08 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12/12/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Huan Tran
Primary Examiner
AU 2861

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-40 are allowed.
2. The following is an examiner's statement of reasons for allowance: Claims 1 and dependent claims thereof are allowable at least for the reason that prior art of record do not teach or suggest –alone or in any combination – the claimed inkjet printhead having the limitation “wherein, each of the liquid passages is formed by etching a blind hole into the wafer from the drop ejection side, and etching a supply passage from the liquid supply side of the wafer to the hole; such that, the blind hole extends into the wafer passed the drive circuitry; and, the supply passage is etched to a depth that extends passed the blind end of the hole by an overlap greater than the sum of the fabrication tolerances of both etch processes”.

Claims 11 and dependent claims thereof are allowable at least for the reason that prior art of record do not teach or suggest the claimed method of ejecting drops of an ejectable liquid from an inkjet printhead wherein the inkjet printhead having the limitation “wherein, each of the liquid passages is formed by etching a blind hole into the wafer from the drop ejection side, and etching a supply passage from the liquid supply side of the wafer to the hole; such that, the blind hole extends into the wafer passed the drive circuitry; and, the supply passage is etched to a depth that extends passed the blind end of the hole by an overlap greater than the sum of the fabrication tolerances of both etch processes”

Claims 21 and dependent claims thereof are allowable at least for the reason that prior art of record do not teach or suggest the claimed method of fabricating inkjet printheads which includes the limitation “forming the nozzles, ejection actuators, associated drive circuitry and

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liquid passage on and through the wafer using lithographically masked etching techniques; including, forming each of the liquid passages by etching a blind hole into the wafer from the drop ejection side; filing the hole with resist; etching a supply passage from the liquid supply side of the wafer to the hole and subsequently stripping the resist from the hole; such that, the blind hole extends into the wafer passed the drive circuitry; and, the supply passage is etched to a depth that extends passed the blind end of the hole by an overlap greater than the sum of the fabrication tolerances of both etch processes”

Claim 31 and dependent claims thereof are allowable for the reason that prior art of record do not teach or suggest the claimed printer system incorporating an inkjet printhead comprising at least the limitation “the nozzles, ejection actuators, associated drive circuitry and liquid passage being formed on and through the wafer using lithographically masked etching techniques; wherein, each of the liquid passages is formed by etching a blind hole into the wafer from the drop ejection side, and etching a supply passage from the liquid supply side of the wafer to the hole; such that, the blind hole extends into the wafer passed the drive circuitry; and, the supply passage is etched to a depth that extends passed the blind end of the hole by an overlap greater than the sum of the fabrication tolerances of both etch processes”

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huan H. Tran whose telephone number is (571) 272-2261. The examiner can normally be reached on at work on W-F from 6:30 to 5; T are telework days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Talbott can be reached on (571) 272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Huan H. Tran
Primary Examiner
Art Unit 2861

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